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## DOC VEILLE

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## Assurance maladie / Health Insurance

**Atun, R., et al. "Health-system reform and universal health coverage in Latin America." The Lancet **385**(9974): 1230-1247.**

Starting in the late 1980s, many Latin American countries began social sector reforms to alleviate poverty, reduce socioeconomic inequalities, improve health outcomes, and provide financial risk protection. In particular, starting in the 1990s, reforms aimed at strengthening health systems to reduce inequalities in health access and outcomes focused on expansion of universal health coverage, especially for poor citizens. In Latin America, health-system reforms have produced a distinct approach to universal health coverage, underpinned by the principles of equity, solidarity, and collective action to overcome social inequalities. In most of the countries studied, government financing enabled the introduction of supply-side interventions to expand insurance coverage for uninsured citizens with defined and enlarged benefits packages and to scale up delivery of health services. Countries such as Brazil and Cuba introduced tax-financed universal health systems. These changes were combined with demand-side interventions aimed at alleviating poverty (targeting many social determinants of health) and improving access of the most disadvantaged populations. Hence, the distinguishing features of health-system strengthening for universal health coverage and lessons from the Latin American experience are relevant for countries advancing universal health coverage.

## Economie de la santé / Health Economics

**Duijmelinck, D. M., et al. (2015). "Switching benefits and costs in competitive health insurance markets: A conceptual framework and empirical evidence from the Netherlands." Health Policy **119**(5): 664-671.**

Competitive health insurance markets will only enhance cost-containment, efficiency, quality, and consumer responsiveness if all consumers feel free to easily switch insurer. Consumers will switch insurer if their perceived switching benefits outweigh their perceived switching costs. We developed a conceptual framework with potential switching benefits and costs in competitive health insurance markets. Moreover, we used a questionnaire among Dutch consumers (1091 respondents) to empirically examine the relevance of the different switching benefits and costs in consumers' decision to (not) switch insurer. Price, insurers' service quality, insurers' contracted provider network, the benefits of supplementary insurance, and welcome gifts are potential switching benefits. Transaction costs, learning costs, 'benefit loss' costs, uncertainty costs, the costs of (not) switching provider, and sunk costs are potential switching costs. In 2013 most Dutch consumers switched insurer because of (1) price and (2) benefits of supplementary insurance. Nearly half of the non-switchers - and particularly unhealthy consumers - mentioned one of the switching costs as their main reason for not switching. Because unhealthy consumers feel not free to easily switch insurer, insurers have reduced incentives to invest in high-quality care for them. Therefore, policymakers should develop strategies to increase consumer choice.

**Melberg, H. O. (2014). "Are healthcare expenditures increasing faster for the elderly than the rest of the population?" Expert Review of Pharmacoeconomics & Outcomes Research **14**(5): 581-583.**

**Pendzialek, J. B., et al. (2015). "Price elasticities in the German Statutory Health Insurance market before and after the health care reform of 2009." *Health Policy* 119(5): 654-663.**

This paper investigates the change in price elasticity of health insurance choice in Germany after a reform of health insurance contributions. Using a comprehensive data set of all sickness funds between 2004 and 2013, price elasticities are calculated both before and after the reform for the entire market. The general price elasticity is found to be increased more than 4-fold from -0.81 prior to the reform to -3.53 after the reform. By introducing a new kind of health insurance contribution the reform seemingly increased the price elasticity of insured individuals to a more appropriate level under the given market parameters. However, further unintended consequences of the new contribution scheme were massive losses of market share for the more expensive sickness funds and therefore an undivided focus on pricing as the primary competitive element to the detriment of quality.

## Géographie de la santé / Geography of Health

**Falster, M. O., et al. (2015). "Sociodemographic and Health Characteristics, Rather Than Primary Care Supply, are Major Drivers of Geographic Variation in Preventable Hospitalizations in Australia." *Med Care* 53(5): 436-445.**

BACKGROUND: Geographic rates of preventable hospitalization are used internationally as an indicator of accessibility and quality of primary care. Much research has correlated the indicator with the supply of primary care services, yet multiple other factors may influence these admissions. OBJECTIVE: To quantify the relative contributions of the supply of general practitioners (GPs) and personal sociodemographic and health characteristics, to geographic variation in preventable hospitalization. METHODS: Self-reported questionnaire data for 267,091 participants in the 45 and Up Study, Australia, were linked with administrative hospital data to identify preventable hospitalizations. Multilevel Poisson models, with participants clustered in their geographic area of residence, were used to explore factors that explain geographic variation in hospitalization. RESULTS: GP supply, measured as full-time workload equivalents, was not a significant predictor of preventable hospitalization, and explained only a small amount (2.9%) of the geographic variation in hospitalization rates. Conversely, more than one-third (36.9%) of variation was driven by the sociodemographic composition, health, and behaviors of the population. These personal characteristics explained a greater amount of the variation for chronic conditions (37.5%) than acute (15.5%) or vaccine-preventable conditions (2.4%). CONCLUSIONS: Personal sociodemographic and health characteristics, rather than GP supply, are major drivers of preventable hospitalization. Their contribution varies according to condition, and if used for performance comparison purposes, geographic rates of preventable hospitalization should be reported according to individual condition or potential pathways for intervention.

**Grady, S. C. and V. Wadhwa (2015). "Today and tomorrow: Reflections on health and medical geography." *Soc Sci Med* 133 : 212-215**

**Loh, C. P. (2015). "Trends and structural shifts in health tourism: Evidence from seasonal time-series data on health-related travel spending by Canada during 1970-2010." *Soc Sci Med* 132: 173-180.**

There has been a growing interest in better understanding the trends and determinants of health tourism activities. While much of the expanding literature on health tourism offers theoretical or qualitative discussion, empirical evidences has been lacking. This study



employs Canada's outbound health tourism activities as an example to examine the trends in health tourism and its association with changing domestic health care market characteristics. A time-series model that accounts for potential structural changes in the trend is employed to analyze the quarterly health-related travel spending series reported in the Balance of Payments Statistics (BOPS) during 1970-2010 ( $n = 156$ ). We identified a structural shift point which marks the start of an accelerated growth of health tourism and a flattened seasonality in such activities. We found that the health tourism activities of Canadian consumers increase when the private investment in medical facilities declines or when the private MPI increases during the years following the structural-change. We discussed the possible linkage of the structural shift to the General Agreement on Trade in Services (GATS), which went into effect in January, 1995.

**Mercier, G., et al. (2015). "Geographic variation in potentially avoidable hospitalizations in France." *Health Aff (Millwood)* 34(5): 836-843.**

Potentially avoidable hospitalizations are studied as an indirect measure of access to primary care. Understanding the determinants of these hospitalizations can help improve the quality, efficiency, and equity of health care delivery. Few studies have tackled the issue of potentially avoidable hospitalizations in France, and none has done so at the national level. We assessed disparities in potentially avoidable hospitalizations in France in 2012 and analyzed their determinants. The standardized rate of potentially avoidable hospitalizations ranged from 0.1 to 44.4 cases per 1,000 inhabitants, at the ZIP code level. Increased potentially avoidable hospitalizations were associated with higher mortality, lower density of acute care beds and ambulatory care nurses, lower median income, and lower education levels. This study unveils considerable variation in the rate of potentially avoidable hospitalizations in spite of France's mandatory, publicly funded health insurance system. In addition to epidemiological and sociodemographic factors, this study suggests that primary care organization plays a role in geographic disparities in potentially avoidable hospitalizations that might be addressed by increasing the number of nurses and enhancing team work in primary care. Policy makers should consider measuring potentially avoidable hospitalizations in France as an indicator of primary care organization.

## Hôpital / Hospitals

**Hogan, H., et al. (2015). Relationship between preventable hospital deaths and other measures of safety: an exploratory study. *International Journal for Quality in Health Care* 27 (2) : 161-162**

**Objective:** To explore associations between the proportion of hospital deaths that are preventable and other measures of safety. **Design:** Retrospective case record review to provide estimates of preventable death proportions. Simple monotonic correlations using Spearman's rank correlation coefficient to establish the relationship with eight other measures of patient safety. **Setting :** Ten English acute hospital trusts. **Participants:** One thousand patients who died during 2009. **Results :** The proportion of preventable deaths varied between hospitals (3-8%) but was not statistically significant ( $P = 0.94$ ). Only one of the eight measures of safety (Methicillin-resistant *Staphylococcus aureus* bacteraemia rate) was clinically and statistically significantly associated with preventable death proportion ( $r = 0.73$ ;  $P < 0.02$ ). There were no significant associations with the other measures including hospital standardized mortality ratios ( $r = -0.01$ ). There was a suggestion that preventable deaths may be more strongly associated with some other measures of outcome than with



process or with structure measures. Conclusion: The exploratory nature of this study inevitably limited its power to provide definitive results. The observed relationships between safety measures suggest that a larger more powerful study is needed to establish the inter-relationship of different measures of safety (structure, process and outcome), in particular the widely used standardized mortality ratios.

**Januleviciute, J., et al. (2015). "How do Hospitals Respond to Price Changes? Evidence from Norway." *Health Econ.*, Ahead of pub**

Many publicly funded health systems use activity-based financing to increase hospital production and efficiency. The aim of this study is to investigate whether price changes for different treatments affect the number of patients treated and the mix of activity provided by hospitals. We exploit the variations in prices created by the changes in the national average treatment cost per diagnosis-related group (DRG) offered to Norwegian hospitals over a period of 5 years (2003-2007). We use the data from Norwegian Patient Register, containing individual-level information on age, gender, type of treatment, diagnosis, number of co-morbidities and the national average treatment costs per DRG. We employ fixed-effect models to examine the changes in the number of patients treated within the DRGs over time. The results suggest that a 10% increase in price leads to about 0.8-1.3% increase in the number of patients treated for DRGs, which are medical (for both emergency and elective patients). In contrast, we find no price effect for DRGs that are surgical (for both emergency and elective patients). Moreover, we find evidence of upcoding. A 10% increase in the ratio of prices between patients with and without complications increases the proportion of patients coded with complications by 0.3-0.4 percentage points. Copyright (c) 2015 John Wiley & Sons, Ltd.

**Joynt, K. E., et al. (2015). "Hospital closures had no measurable impact on local hospitalization rates or mortality rates, 2003-11." *Health Aff (Millwood)* 34(5): 765-772.**

The Affordable Care Act (ACA) set in motion payment changes that could put pressure on hospital finances and lead some hospitals to close. Understanding the impact of closures on patient care and outcomes is critically important. We identified 195 hospital closures in the United States between 2003 and 2011. We found no significant difference between the change in annual mortality rates for patients living in hospital service areas (HSAs) that experienced one or more closures and the change in rates in matched HSAs without a closure (5.5 percent to 5.2 percent versus 5.4 percent to 5.4 percent, respectively). Nor was there a significant difference in the change in all-cause mortality rates following hospitalization (9.1 percent to 8.2 percent in HSAs with a closure versus 9.0 percent to 8.4 percent in those without a closure). HSAs with a closure had a drop in readmission rates compared to controls (19.4 percent to 18.2 percent versus 18.8 percent to 18.3 percent). Overall, we found no evidence that hospital closures were associated with worse outcomes for patients living in those communities. These findings may offer reassurance to policy makers and clinical leaders concerned about the potential acceleration of hospital closures as a result of health care reform.

**Mascia, D., et al. (2015). "Effect of hospital referral networks on patient readmissions." *Soc Sci Med* 132: 113-121.**

Previous studies have shown that referral networks encompass important mechanisms of coordination and integration among hospitals, which enhance numerous organizational-level benefits, such as productivity, efficiency, and quality of care. The present study advances previous research by demonstrating how hospital referral networks influence patient readmissions. Data include 360,697 hospitalization events within a regional community of hospitals in the Italian National Health Service. Multilevel hierarchical regression analysis

tests the impacts of referral networks' structural characteristics on patient hospital readmissions. The results demonstrate that organizational centrality in the overall referral network and ego-network density have opposing effects on the likelihood of readmission events within hospitals; greater centrality is negatively associated with readmissions, whereas greater ego-network density increases the likelihood of readmission events. Our findings support the (re)organization of healthcare systems and provide important indications for policymakers and practitioners.

**Mascia, D., et al. (2015). "Effect of hospital referral networks on patient readmissions." *Soc Sci Med* 132: 113-121.**

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**Sundmacher, L. and T. Kopetsch (2015). "The impact of office-based care on hospitalizations for ambulatory care sensitive conditions." *Eur J Health Econ* 16(4): 365-375.**

**OBJECTIVE:** The aim of the study was to quantify the impact of specific medical services in the ambulatory sector (SA) on hospitalizations for ambulatory care sensitive conditions (ACSCs), in order to be able to assess whether and under what conditions specific ambulatory treatments could serve to lower the hospitalization rate. **DATA SOURCE:** The analysis is based on administrative data showing the complete provision of medical services in the ambulatory sector in Germany and data from other sources. The data were provided by the National Association of Statutory Health Insurance Physicians, the Federal Statistical Agency, the Federal Office of Construction and Regional Planning, and the Federal Insurance Agency. **STUDY DESIGN:** The impact of an increase in specific medical services on hospitalizations for ACSCs was estimated using linear spatial models at the level of the 413 German counties and county boroughs for the years 2007 and 2008. To allow for an undistorted estimation of the coefficients, SA and physician density were instrumented using a two-stage 'least squares' approach. The SA and the rate of hospitalizations for ACSCs were age-standardized. In the models, a well-defined set of covariates was controlled for. **PRINCIPAL FINDINGS:** According to the models, an additional <euro> spent on ACSC treatment decreases the rate of hospitalizations for ACSCs for women and men up to an annual Uniform Value Scale For Doctors' Fees point value of approximately 6,891 and 5,735, respectively. The correlation is not linear but, as suspected, exhibits diminishing marginal returns. **CONCLUSIONS:** Our models suggest that additional medical services reduce the rate of hospitalizations for ACSCs but that this correlation depends on the absolute level of office-based services in a county, all covariates being held equal. Ceteris paribus counties with a very high volume of services exhibit 'flat-of-the-curve medicine', while counties with a very low current.

**Tai, W., et al. (2014). "What can be achieved by redesigning stroke care for a value-based world?"** *Expert Review of Pharmacoeconomics & Outcomes Research* **14**(5): 585-587.

**Weeks, W. B., et al. (2015). "Characteristics and patterns of elective admissions to for-profit and not-for-profit hospitals in France in 2009 and 2010."** *Soc Sci Med* **133**: 53-58.

In the mid 2000s, in an effort to increase competition among hospitals in France - and thereby reduce hospital care costs - policymakers implemented a prospective payment system and created incentives to promote use of for-profit hospitals. But such policies might incentivize 'upcoding' to higher-reimbursed procedures or overuse of preference-sensitive elective procedures, either of which would offset anticipated cost savings. To explore either possibility, we examined the relative use and costs of admissions for ten common preference-sensitive elective surgical procedures to French not-for profit and for-profit sector hospitals in 2009 and 2010. For each admission type, we compared sector-specific hospitalization characteristics and mean per-admission reimbursement and sector-specific relative rates of lower- and higher-reimbursed procedures. We found that, despite having substantially fewer beds, for-profit hospitals captured a large portion of market for these procedures; further, for-profit admissions were shorter and less expensive, even after adjustment for patient demographics, hospital characteristics, and patterns of admission to different reimbursement categories. While French for-profit hospitals appear to provide more efficient care, we found coding inconsistencies across for-profit and not-for-profit hospitals that may suggest supplier-induced demand and upcoding in for-profit hospitals. Future work should examine sector-specific changes in relative use and billing practices of for elective surgeries, the degree to which these elective surgeries are justified in either sector, and whether outcomes differ according to sector used.

**Widmer, P. K. (2015). "Does prospective payment increase hospital (in)efficiency? Evidence from the Swiss hospital sector."** *Eur J Health Econ* **16**(4): 407-419.

Several European countries have followed the USA in introducing prospective payment for hospitals with the expectation of achieving cost efficiency gains. This article examines whether theoretical expectations of cost efficiency gains can be empirically confirmed. In contrast to previous studies, the analysis of hospitals in Switzerland provides a comparison of a retrospective per diem payment system with a prospective global budget and a payment per patient case system. Using a sample of approximately 90 public financed Swiss hospitals during the years 2004-2009 and Bayesian inference of a standard and a random parameter frontier model, cost efficiency gains are found, particularly with payment per patient case. Prospective payment, designed to put hospitals at operating risk, is more effective in terms of cost reduction than the retrospective alternative. However, hospitals are heterogeneous with respect to their production technologies, making a random parameter frontier model the superior specification for Switzerland.

## Inégalités de santé / Health Inequalities

**Sorensen, K., et al. (2015). "Health literacy in Europe: comparative results of the European health literacy survey (HLS-EU)."** *Eur J Public Health*. [Epub ahead of print]

Background: Health literacy concerns the capacities of people to meet the complex demands of health in modern society. In spite of the growing attention for the concept among European health policymakers, researchers and practitioners, information about the status of health literacy in Europe remains scarce. This article presents selected findings from the

first European comparative survey on health literacy in populations. Methods : The European health literacy survey (HLS-EU) was conducted in eight countries: Austria, Bulgaria, Germany, Greece, Ireland, the Netherlands, Poland and Spain (n = 1000 per country, n = 8000 total sample). Data collection was based on Eurobarometer standards and the implementation of the HLS-EU-Q (questionnaire) in computer-assisted or paper-assisted personal interviews. Results: The HLS-EU-Q constructed four levels of health literacy: insufficient, problematic, sufficient and excellent. At least 1 in 10 (12%) respondents showed insufficient health literacy and almost 1 in 2 (47%) had limited (insufficient or problematic) health literacy. However, the distribution of levels differed substantially across countries (29-62%). Subgroups within the population, defined by financial deprivation, low social status, low education or old age, had higher proportions of people with limited health literacy, suggesting the presence of a social gradient which was also confirmed by raw bivariate correlations and a multivariate linear regression model. Discussion: Limited health literacy represents an important challenge for health policies and practices across Europe, but to a different degree for different countries. The social gradient in health literacy must be taken into account when developing public health strategies to improve health equity in Europe.

## Médicaments / Pharmaceuticals

**Antoñanzas, F., et al. (2014). "Should the patent system for pharmaceuticals be replaced? A theoretical approach." Expert Review of Pharmacoeconomics & Outcomes Research 14(5): 617-626.**

**Bae, G., et al. (2015). "Same drugs, valued differently? Comparing comparators and methods used in reimbursement recommendations in Australia, Canada, and Korea." Health Policy 119(5): 577-587.**

To investigate whether the value of the same drug is evaluated differently across jurisdictions, publicly available reimbursement recommendation data from the Health Insurance Review and Assessment Service (HIRA, Korea) from January 2007 until July 2012 were compared with reimbursement recommendation data from the Pharmaceutical Benefit Advisory Committee (PBAC) of Australia, and the Common Drug Review (CDR) and the pan-Canadian Oncology Drug review (pCODR) of Canada. The most recent guidelines from the three agencies regarding the recommended methods of economic evaluation and comparator selection were also compared. During the observation period, 25 products were evaluated by all three countries. No significant differences in the comparator(s)' selection or methods of economic evaluation were found, but the CDR was significantly less likely to positively recommend products compared with the other agencies ( $p=0.023$ ). The agreement between agencies on selected comparator(s) was moderate to significant (kappa statistics=0.590-0.669), whereas the reimbursement decisions (kappa statistics=0.042-0.296) and the methods of economic evaluation (kappa statistics=0.138-0.525) showed slight to fair agreement. We illustrated that the divergence in reimbursement decisions across jurisdictions is less related to comparator selection or the level of clinical evidence considered and more related to country-specific issues.

**Basak, R., et al. (2015). "The role of perceived impact on relationship quality in pharmacists' willingness to influence indication-based off-label prescribing decisions." Soc Sci Med 132: 181-189.**

Little is known about factors that affect pharmacists' roles in off-label prescribing. This study

examined the effect of perceived impact on relationship quality (IRQ) on hospital pharmacists' willingness to influence a physician's decision regarding an indication-based off-label medication order (WTIP) (i.e., beyond FDA-approved indications) and the moderating roles of the appropriateness of the medication order and the relative expert power of the pharmacist. Pharmacists practicing in U.S. hospitals, recruited from membership rolls of state affiliates of the American Society of Health-System Pharmacists, were sent an electronic link to a questionnaire via their respective affiliates. A cross-sectional, randomized, 2 x 2 experimental design was used; participants were assigned to one of the indication-based off-label medication order scenarios. Relative expert power (i.e., power differential between the pharmacist and the physician) and appropriateness of the prescription were manipulated. Perceived IRQ was measured with multiple items. Pharmacists' WTIP in the scenario was the outcome variable. A total of 243 responses were included in multiple linear regression analyses. After controlling for dependence power, information power, communication effectiveness, perceived responsibility, and attitude, pharmacists' WTIP was negatively affected by perceived IRQ (estimate = -0.309,  $P < 0.05$ ). This effect was more pronounced in groups exposed to the scenario where the pharmacist had lower relative expert power (estimate = -0.438,  $P < 0.05$ ) and where the medication was less appropriate (estimate = -0.503,  $P < 0.05$ ). Although willing to ensure rationality of off-label prescribing, pharmacists' WTIP was affected by a complex array of factors - the perceived impact of influence attempts on relationship quality between the pharmacist and the prescriber, the pharmacist's relative expert power, and the appropriateness of the off-label prescription. Increasing pharmacists' expert power and collaboration with physicians and promoting pharmacists' multifaceted contribution, collaborative or independent, to patient care may facilitate pharmacist services in off-label pharmaceutical care.

**Brown, T. T. and J. C. Robinson (2015). "Reference Pricing with Endogenous or Exogenous Payment Limits: Impacts on Insurer and Consumer Spending." *Health Econ.* [Epub ahead of print]** Reference pricing (RP) theories predict different outcomes when reference prices are fixed (exogenous) versus being a function of market prices (MPs) (endogenous). Exogenous RP results in MPs at both high-price and low-price firms converging towards the reference price from above and below, respectively. Endogenous RP results in MPs at both high-price and low-price firms decreasing, with low-price firms acting strategically to decrease the reference price in order to gain market share. We extend these models to a hospital context focusing on insurer and consumer payments. Under exogenous RP, insurer and consumer payments to low-price hospitals increase, and insurer payments to high-price hospitals decrease, but predictions regarding consumer payments are ambiguous for high-price hospitals. Under endogenous RP, insurer payments to high-price and low-price hospitals decrease, and consumer payments to low-price hospitals decrease, but predictions regarding consumer payments are ambiguous for high-price hospitals. We test these predictions with difference-in-differences specifications using 2008-2013 data on patients undergoing joint replacement. For 2 years following RP implementation, insurer payments to high-price and low-price hospitals moved downward, consistent with endogenous RP. However, when the reference price was not reset to account for changes in MPs, insurer payments to low-price hospitals reverted to pre-implementation levels, consistent with exogenous RP. Copyright (c) 2015 John Wiley & Sons, Ltd.

**Dylst, P., et al. (2014). "Analysis of French generic medicines retail market: why the use of generic medicines is limited." *Expert Review of Pharmacoeconomics & Outcomes Research* 14(6): 795-803.**

**Dylst, P., et al. (2015). "Analysis of the Italian generic medicines retail market: recommendations to**



**enhance long-term sustainability.** " Expert Review of Pharmacoeconomics & Outcomes Research **15**(1): 33-42.

**Nianogo, T., et al. (2015). "Determinants of US Prescription Drug Utilization using County Level Data." Health Econ., Ahead of pub**

Prescription drugs are the third largest component of US healthcare expenditures. The 2006 Medicare Part D and the 2010 Affordable Care Act are catalysts for further growths in utilization because of insurance expansion effects. This research investigating the determinants of prescription drug utilization is timely, methodologically novel, and policy relevant. Differences in population health status, access to care, socioeconomics, demographics, and variations in per capita number of scripts filled at retail pharmacies across the USA justify fitting separate econometric models to county data of the states partitioned into low, medium, and high prescription drug users. Given the skewed distribution of per capita number of filled prescriptions (response variable), we fit the variance stabilizing Box-Cox power transformation regression models to 2011 county level data for investigating the correlates of prescription drug utilization separately for low, medium, and high utilization states. Maximum likelihood regression parameter estimates, including the optimal Box-Cox lambda power transformations, differ across high ( $\lambda = 0.214$ ), medium ( $\lambda = 0.942$ ), and low ( $\lambda = 0.302$ ) prescription drug utilization models. The estimated income elasticities of -0.634, 0.031, and -0.532 in high, medium, and low utilization models suggest that the economic behavior of prescriptions is not invariant across different utilization levels. Copyright (c) 2015 John Wiley & Sons, Ltd.

**Takizawa, O., et al. (2015). "Price difference as a predictor of the selection between brand name and generic statins in Japan." Health Policy **119**(5): 612-619.**

**OBJECTIVES:** This study aimed to explore the predictors of the selection between brand name drug (BR) and generic drug (GE) and to clarify the quantitative relationship about selection. **METHODS:** We identified "incident users" who dispensed statins between April 2008 and June 2011 in commercially databases consisted of dispensing claims databases (DCD) of out-of-hospital pharmacies and hospital claims databases (HCD) of in-house pharmacies in Japan. Predictors of the selection between BR and GE, including price difference (PD), the price of BR, their interaction and percent change of the price of GE relative to BR were explored by logistic regression using DCD and HCD separately. **RESULTS:** We extracted records of 670 patients who have opportunity for selection both BR and GE. Logistic regression analysis demonstrated that PD, the price of BR, interaction between them, and prescriber affiliation were factors significantly associated with the selection in the DCD;  $\text{logit}(p) = 9.735 - 0.251 \times \text{PD} - 0.071 \times \text{the price of BR} + 0.002 \times \text{PD} \times \text{the price of BR} - 1.816 \times \text{affiliation} + 0.220 \times \text{gender} - 0.008 \times \text{age} + 0.038 \times \text{monthly medical fee}$ . PD was inversely proportional to BR choice in DCD and lead to the opposite result in HCD. Numerical simulation of selection revealed that the quantitative relationships heavily depend on situations. **CONCLUSIONS:** PD and the price of BR are predictors of the selection between BR and GE interactively in out-of-hospital pharmacies, but not in in-house pharmacies of medical facilities. Results may support policies which increase the power of out-of-hospital pharmacies for selection.

**Wisell, K., et al. (2015). "Reregulation of the Swedish pharmacy sector-A qualitative content analysis of the political rationale." Health Policy **119**(5): 648-653.**

In 2009, a reregulation of the Swedish pharmacy sector took place, and a fundamental change in ownership and structure followed. The reregulation provides an opportunity to reveal the politicians' views on pharmacies. The aim of this study was to explore and analyze the political arguments for the reregulation of the Swedish pharmacy sector in 2009. The

method used was a qualitative content analysis of written political documents regarding the reregulation. The primary rationales for the reregulation were better availability, efficiency, price pressure, and safe usage of medicines. During the preparatory work, the rationales of diversity on the market and entrepreneurship were added, while the original rationales of efficiency, price pressure, and better usage of medicines were abandoned. The reform can be seen as a typical New Public Management reform influenced by the notion that private actors are better equipped to perform public activities. The results point to that the reform was done almost solely in order to introduce private ownership in the pharmacy sector, and was not initiated in order to solve any general problems, or to enhance patient outcomes of medicine use.

## Méthodologie – Statistique / Methodology - Statistics

**Boudreaux, M. H., et al. (2015). "Measurement Error in Public Health Insurance Reporting in the American Community Survey: Evidence from Record Linkage." Health Services Research: [Ahead of pub]**

**Objective** Examine measurement error to public health insurance in the American Community Survey (ACS). **Data Sources/Study Setting** The ACS and the Medicaid Statistical Information System (MSIS). **Study Design** We tabulated the two data sources separately and then merged the data and examined health insurance reports among ACS cases known to be enrolled in Medicaid or expansion Children's Health Insurance Program (CHIP) benefits. **Data Collection/Extraction Methods** The two data sources were merged using protected identification keys. ACS respondents were considered enrolled if they had full benefit Medicaid or expansion CHIP coverage on the date of interview. **Principal Findings** On an aggregated basis, the ACS overcounts the MSIS. After merging the data, we estimate a false-negative rate in the 2009 ACS of 21.6 percent. The false-negative rate varies across states, demographic groups, and year. Of known Medicaid and expansion CHIP enrollees, 12.5 percent were coded to some other coverage and 9.1 percent were coded as uninsured. **Conclusions** The false-negative rate in the ACS is on par with other federal surveys. However, unlike other surveys, the ACS overcounts the MSIS on an aggregated basis. Future work is needed to disentangle the causes of the ACS overcount.

**Broekhuizen, H., et al. (2015). "A Review and Classification of Approaches for Dealing with Uncertainty in Multi-Criteria Decision Analysis for Healthcare Decisions." Pharmacoeconomics 33(5): 445-455.**

**Kemmick Pintor, J. B., et al. (2015). "Propensity score matching to measure the effect of survey mode on reports of racial and ethnic discrimination in health care." Med Care 53(5): 471-476.**

**OBJECTIVE:** To examine the effect of survey mode (mail vs. telephone) on the likelihood of reporting health care-related discrimination based on race, ethnicity, or nationality. **METHODS:** We use data from a mixed-mode, mail and telephone survey of public health care program enrollees (N=2807), including Somali, Hmong, African American, American Indian, and Latino populations. Self-reported discrimination was measured as the experience of unfair treatment by health care providers due to race, ethnicity, or nationality. We use propensity score matching to create exchangeable groups of phone and mail respondents based on the probability of completing the survey by phone. **RESULTS:** Overall, 33.1% of respondents reported having experienced discrimination in health care, but only 23.6% of



telephone respondents reported discrimination compared with 36.8% of mail respondents. After matching phone and mail respondents based on probability of responding by telephone, all observable significant differences between respondents that were brought about by differential self-selection into mode were erased, allowing us to estimate the effect of survey mode on report of discrimination. Even after matching, the mode effect remains, where report of health care discrimination for telephone respondents would have been 12.6 percentage points higher had they responded by mail (22.6% vs. 35.2%). **CONCLUSIONS:** Survey mode has a significant effect on report of discrimination. Respondents may be more willing to disclose experiences of discrimination in a mail survey than to a telephone interviewer. Findings have substantial policy and clinical significance as variation in report of discrimination based on mode may lead to underestimation of the extent of the problem.

**Mason, T., et al. (2015). "Exploring the limitations of age-based models for health care planning." *Soc Sci Med* 132: 11-19.**

Health care decision makers are required to make planning decisions over a medium to long term planning horizon. Whilst population ageing is an important consideration for planners, age-stratified demographic models may produce misleading estimates of future resource requirements if the actual relationship between age and health is not fixed. We present a methodology which tests whether the assumption of a fixed age-health relationship is valid and estimate the magnitude of planning errors using a long time-series of measures of chronic health and service utilisation (N = 2419) taken from the Great British General Household Survey (1980-2008). We find that age-only models contain significant omitted variable bias, and that the relationship between age and health varies significantly across birth cohorts. Chronic sickness has fallen across birth cohorts born between 1890 and 2008, particularly before birth year 1930. Generational health improvements have mitigated the effects of population ageing, meaning that the population rate of sickness fell between 1980 and 2008. Planning based only on age leads to overestimation of the population level of health care need if successive cohorts are becoming healthier. Many alternative approaches exist which allow planners to relax the assumption of a fixed relationship between age and health.

## Politique de santé / Health Policy

**George, A., et al. (2015). "Anchoring contextual analysis in health policy and systems research: A narrative review of contextual factors influencing health committees in low and middle income countries." *Soc Sci Med* 133: 159-167.**

Health committees, councils or boards (HCs) mediate between communities and health services in many health systems. Despite their widespread prevalence, HC functions vary due to their diversity and complexity, not least because of their context specific nature. We undertook a narrative review to better understand the contextual features relevant to HCs, drawing from Scopus and the internet. We found 390 English language articles from journals and grey literature since 1996 on health committees, councils and boards. After screening with inclusion and exclusion criteria, we focused on 44 articles. Through an iterative process of exploring previous attempts at understanding context in health policy and systems research (HPSR) and the HC literature, we developed a conceptual framework that delineates these contextual factors into four overlapping spheres (community, health facilities, health administration, society) with cross-cutting issues (awareness, trust, benefits, resources, legal mandates, capacity-building, the role of political parties, non-governmental organizations,

markets, media, social movements and inequalities). While many attempts at describing context in HPSR result in empty arenas, generic lists or amorphous detail, we suggest anchoring an understanding of context to a conceptual framework specific to the phenomena of interest. By doing so, our review distinguishes between contextual elements that are relatively well understood and those that are not. In addition, our review found that contextual elements are dynamic and porous in nature, influencing HCs but also being influenced by them due to the permeability of HCs. While reforms focus on tangible HC inputs and outputs (training, guidelines, number of meetings held), our review of contextual factors highlights the dynamic relationships and broader structural elements that facilitate and/or hinder the role of health committees in health systems. Such an understanding of context points to its contingent and malleable nature, links it to theorizing in HPSR, and clarifies areas for investigation and action.

**Kolasa, K., et al. (2015). "Pricing and reimbursement frameworks in Central Eastern Europe: a decision tool to support choices." Expert Review of Pharmacoeconomics & Outcomes Research 15(1): 145-155.**

## Prévention / Prevention

**Flego, A., et al. (2014). "Cost-effectiveness of whole-of-community obesity prevention programs: an overview of the evidence." Expert Review of Pharmacoeconomics & Outcomes Research 14(5): 719-727.**

## Prévision – Evaluation / Prevision -Evaluation

**Haji Ali Afzali, H. and J. Karnon (2015). "Exploring Structural Uncertainty in Model-Based Economic Evaluations." PharmacoEconomics 33(5): 435-443.**

Given the inherent uncertainty in estimates produced by decision analytic models, the assessment of uncertainty in model-based evaluations is an essential part of the decision-making process. Although the impact of uncertainty around the choice of model structure and making incorrect structural assumptions on model predictions is noted, relatively little attention has been paid to characterising this type of uncertainty in guidelines developed by national funding bodies such as the Australian Pharmaceutical Benefits Advisory Committee (PBAC). The absence of a detailed description and evaluation of structural uncertainty can add further uncertainty to the decision-making process, with potential impact on the quality of funding decisions. This paper provides a summary of key elements of structural uncertainty describing why it matters and how it could be characterised. Five alternative approaches to characterising structural uncertainty are discussed, including scenario analysis, model selection, model averaging, parameterization and discrepancy. We argue that the potential effect of structural uncertainty on model predictions should be considered in submissions to national funding bodies; however, the characterisation of structural uncertainty is not well defined within the guidelines of these bodies. There has been little consideration of the forms of structural sensitivity analysis that might best inform applied decision-making processes, and empirical research in this area is required.

## Soins de santé primaires / Primary Health Care

**Adalsteinn D. Brown, R. U. and J. S. Terrence (2013). "Public Health and Primary Care: Competition or Collaboration." *HealthcarePapers* 13(3): 4-8.**

In this commentary, the authors summarize and discuss some of the concerns presented in the papers herein, including issues of funding, skill sets and education. They present two key steps we could take across this country to ensure the long-term viability of public health within our healthcare system and ensure that public health and population goals are shared widely across our health systems.

**Ashlinder Gill, et al. (2014). "Where Do We Go from Here?" Health System Frustrations Expressed by Patients with Multimorbidity, Their Caregivers and Family Physicians." *Healthcare Policy* 9(4): 73-89.**

Objectives: This study explored the care challenges experienced by older patients with multimorbidity, their informal caregivers and family physicians. Approach: Semi-structured interviews were conducted with 27 patients, their informal caregivers and family physicians. Qualitative description was used to identify key themes in the interview transcripts. Results: Participants experienced many common challenges when managing multimorbidity, including a lack of decision-making support, poor communication and uncoordinated health services. Within these themes, unique perspectives specific to the role of being a patient, caregiver or family physician emerged. Conclusion: The study adds to a limited evidence base on the experience of patients with multimorbidity. By including the perspectives of their family caregivers and physicians, we provide important insight into the management of multimorbidity and recommend the uptake of specific strategies to address them.

**Brent, W. M. (2013). "Public Health Readiness and Role in Transformation to a Community-Based Primary Healthcare System." *HealthcarePapers* 13(3): 64-70.**

Millar et al. provide a high-level vision for transforming primary care into a community-based primary healthcare system, arguing that public health involvement is critical to the success of this transformation. The authors discuss a number of approaches to mitigate challenges to public health's readiness to participate. In this commentary, the author addresses selected points encouraging the avoidance of high-level conceptual language, a focus on specific value-added linkages and addressing the complex range of critical success factors needed to effect this transformation.

**Dumontet, M. and C. Franc (2015). "Gender differences in French GPs' activity: the contribution of quantile regressions." *Eur J Health Econ* 16(4): 421-435.**

In any fee-for-service system, doctors may be encouraged to increase the number of services (private activity) they provide to receive a higher income. Studying private activity determinants helps to predict doctors' provision of care. In the context of strong feminization and heterogeneity in general practitioners' (GP) behavior, we first aim to measure the effects of the determinants of private activity. Second, we study the evolution of these effects along the private activity distribution. Third, we examine the differences between male and female GPs. From an exhaustive database of French GPs working in private practice in 2008, we performed an ordinary least squares (OLS) regression and quantile regressions (QR) on the GPs' private activity. Among other determinants, we examined the trade-offs within the GPs' household considering his/her marital status, spousal income, and children. While the OLS results showed that female GPs had less private activity than male GPs (-13 %), the QR

results emphasized a private activity gender gap that increased significantly in the upper tail of the distribution. We also find gender differences in the private activity determinants, including family structure, practice characteristics, and case-mix variables. For instance, having a youngest child under 12 years old had a positive effect on the level of private activity for male GPs and a negative effect for female GPs. The results allow us to understand to what extent the supply of care differs between male and female GPs. In the context of strong feminization, this is essential to consider for organizing and forecasting the GPs' supply of care.

**Groenewoud, S., et al. (2015). "What Influences Patients' Decisions When Choosing a Health Care Provider? Measuring Preferences of Patients with Knee Arthrosis, Chronic Depression, or Alzheimer's Disease, Using Discrete Choice Experiments." *Health Services Research: Ahead of pub***

**Objective** To investigate what influences patients' health care decisions and what the implications are for the provision of information on the quality of health care providers to patients. **Data Sources/Study Setting** Dutch patient samples between November 2006 and February 2007. **Study Design** Discrete choice experiments were conducted in three patient groups to explore what influences choice for health care providers. **Data Collection** Data were obtained from 616 patients with knee arthrosis, 368 patients with chronic depression, and 421 representatives of patients with Alzheimer's disease. **Principal Findings** The three patients groups chose health care providers on a different basis. The most valued attributes were effectiveness and safety (knee arthrosis); continuity of care and relationship with the therapist (chronic depression); and expertise (Alzheimer's disease). Preferences differed between subgroups, mainly in relation to patients' choice profiles, severity of disease, and some background characteristics. **Conclusions** This study showed that there is substantial room for (quality) information about health care providers in patients' decision processes. This information should be tailor-made, targeting specific patient segments, because different actors and factors play a part in their search and selection process.

**Jami, A., et al. (2015). "[General practitioners' representations and perceptions about the medical practice standards they are facing]." *Presse Med* 44(4 Pt 1): e92-99.**

**BACKGROUND:** Since the early 1990s, national health institutions including the national health insurance increase the incentives for physicians to comply with standards of good practice dedicating these standards in medical practices. The objective of this study was to explore GP's on standards of medical practice in a context of standardization. **METHOD:** Individual semi-structured qualitative interviews with 16 GPs in Ile-de-France. **RESULTS:** Thematic analysis of 16 interviews has highlighted that doctors had the impression of being confronted with multiple medical practice guidelines from various sources. They said they consider these standards as indicative benchmarks and not as imperatives to comply. Strict standardization of practices did not seem compatible with their profession given the singular and complex nature of each situation and the necessary comprehensive care to their patients. They opposed ethical arguments insistent standardization. Mandatory standards appeared detrimental to their quality of care. Doctors have said it better accept scientific guidelines than standards of health insurance that seemed directed to them by economic considerations. They said also to experience a significant normative pressure from health insurance. **DISCUSSION:** GPs had spotted increasing standards governing their practices. They were not opposed to the fact that they may be indicative targets provided they are not mandatory.

**Laurent, F., et al. (2015). "[Contract for improving professional practices: What is the impact perceived by GPs?]." *Rev Epidemiol Sante Publique* 63(2): 67-76.**

**BACKGROUND:** The CAPI (contract for improving professional practices) is a voluntary pay for performance scheme for primary care physicians introduced in France in 2009. Our objective was to analyze general practitioners' (GPs) perceptions of the impact of the CAPI on their healthcare practices. **METHOD:** The methodology was both qualitative, using thematic analysis of responses to three items of a questionnaire mailed to GPs in 2011, and quantitative using thematic multiple correspondence analysis of responses together with cluster analysis based on the ward aggregation criterion. **RESULTS:** A total of 1050 general practitioners answered, 31% had signed a CAPI. For CAPI-participating GPs, the contract was mostly related to changing practices for drug prescription. GPs who did not participate in the CAPI focused on ethical issues. They denounced a conflict of interest between the doctor and the patient and also the risk of patient selection. They connected these concepts to selected indicators. Due to their relationship with the health insurance fund, they feared their freedom of practice would be restricted. **CONCLUSION:** GP involvement in designing indicators would favor better balance between economic goals and values of care. The patients' viewpoint should be studied. Pay for performance has been renewed in the 2011. Further studies will analyze the impact of this new scheme in a medical and economic perspective.

**McWilliams, J. M., et al. (2015). "Performance Differences in Year 1 of Pioneer Accountable Care Organizations." N Engl J Med. April 15**

**Background** In 2012, a total of 32 organizations entered the Pioneer accountable care organization (ACO) program, in which providers can share savings with Medicare if spending falls below a financial benchmark. Performance differences associated with characteristics of Pioneer ACOs have not been well described. **Methods** In a difference-in-differences analysis of Medicare fee-for-service claims, we compared Medicare spending for beneficiaries attributed to Pioneer ACOs (ACO group) with other beneficiaries (control group) before (2009 through 2011) and after (2012) the start of Pioneer ACO contracts, with adjustment for geographic area and beneficiaries' sociodemographic and clinical characteristics. We estimated differential changes in spending for several subgroups of ACOs: those with and those without clear financial integration between hospitals and physician groups, those with higher and those with lower baseline spending, and the 13 ACOs that withdrew from the Pioneer program after 2012 and the 19 that did not. **Results** Adjusted Medicare spending and spending trends were similar in the ACO group and the control group during the precontract period. In 2012, the total adjusted per-beneficiary spending differentially changed in the ACO group as compared with the control group (-\$29.2 per quarter,  $P=0.007$ ), consistent with a 1.2% savings. Savings were significantly greater for ACOs with baseline spending above the local average, as compared with those with baseline spending below the local average ( $P=0.05$  for interaction), and for those serving high-spending areas, as compared with those serving low-spending areas ( $P=0.04$ ). Savings were similar in ACOs with financial integration between hospitals and physician groups and those without, as well as in ACOs that withdrew from the program and those that did not. **Conclusions** Year 1 of the Pioneer ACO program was associated with modest reductions in Medicare spending. Savings were greater for ACOs with higher baseline spending than for those with lower baseline spending and were unrelated to withdrawal from the program. (Funded by the National Institute on Aging and others.).

**Mossialos, E., et al. (2015). "From "retailers" to health care providers: Transforming the role of community pharmacists in chronic disease management." Health Policy 119(5): 628-639.**

Community pharmacists are the third largest healthcare professional group in the world after physicians and nurses. Despite their considerable training, community pharmacists are the only health professionals who are not primarily rewarded for delivering health care and



hence are under-utilized as public health professionals. An emerging consensus among academics, professional organizations, and policymakers is that community pharmacists, who work outside of hospital settings, should adopt an expanded role in order to contribute to the safe, effective, and efficient use of drugs-particularly when caring for people with multiple chronic conditions. Community pharmacists could help to improve health by reducing drug-related adverse events and promoting better medication adherence, which in turn may help in reducing unnecessary provider visits, hospitalizations, and readmissions while strengthening integrated primary care delivery across the health system. This paper reviews recent strategies to expand the role of community pharmacists in Australia, Canada, England, the Netherlands, Scotland, and the United States. The developments achieved or under way in these countries carry lessons for policymakers world-wide, where progress thus far in expanding the role of community pharmacists has been more limited. Future policies should focus on effectively integrating community pharmacists into primary care; developing a shared vision for different levels of pharmacist services; and devising new incentive mechanisms for improving quality and outcomes.

**Moureaux, C., et al. (2015). "Impact of the medical home model on the quality of primary care: the belgian experience." *Med Care* 53(5): 396-400.**

Background: The Belgium medical home (MH) model, which has been garnering support of late, resembles its US counterpart in that it aims at improving the quality of health care while containing costs. Objectives: To compare the quality of care offered by MHs with that offered by traditional individual practices (IPs) in Belgium in terms of the extent of their adherence to clinical practice guidelines in antibiotherapy, cervical-cancer screening, influenza vaccination, and the management of diabetes. Research Design: This is a retrospective study using public insurance claims data. Data consisted of a random sample of patients using the services of MHs and IPs who were previously matched according to sex, age category, location, disability, and socioeconomic status. We applied the McNemar test, the t test, or the Wilcoxon test, depending on the type of variable being compared. Subjects: The final sample comprised 43,678 patients in the year 2004. MEASURES: On the basis of a review of the literature, we selected 4 themes, corresponding to 25 indicators: antibiotherapy, cervical-cancer screening, influenza vaccination, and the management of diabetes. Results: MHs were more likely than IPs to adhere to evidence-based clinical practice guidelines. They prescribed less and more appropriate antibiotherapy, provided wider influenza-vaccination coverage for target groups, and provided a better follow-up for diabetics than did IPs. In regard to cervical-cancer screening, no significant differences were found. Conclusions: MHs, as they combine a greater adherence to guidelines and savings in secondary care, are a cost-effective alternative to traditional IPs and therefore should be encouraged.

**Saleh, S., et al. (2015). Quality of care in primary health care settings in the Eastern Mediterranean region: a systematic review of the literature. *International Journal of Quality in Health Care*. 27 (2) : 79-88.**

Purpose This systematic review aims at offering a comprehensive synthesis of studies addressing quality of care in the primary healthcare (PHC) sector of the Eastern Mediterranean Region (EMR). Data sources A systematic search was conducted using Medline, Embase and Global Health Library (IMEMR) electronic databases to identify studies related to quality in PHC between years 2000 and 2012. Study selection/data extraction One hundred and fifty-nine (159) studies fulfilled the eligibility criteria. Each paper was independently reviewed by two reviewers, and the following information was extracted/calculated: dimension of care investigated (structure, processes and outcomes), focus, disease groups, study design, sample size, unit of analysis, response rate, country,

setting (public or private) and level of rigor (LOR) score. Results of data synthesis Most of the studies were descriptive/cross-sectional in nature with a relatively modest LOR score. Assessment of quality of care revealed that the process dimension of quality, specifically clinical practice and patient-provider relationship, is an area of major concern. However, interventions targeting enhanced quality in PHC in the EMR countries had favorable and effective outcomes in terms of clinical practice. Conclusion These findings highlight gaps in evidence on quality in PHC in the EMR; such evidence is key for decision-making. Researchers and policy-makers should address these gaps to generate contextualized information and knowledge that ensures relevance and targeted high-impact interventions.

**Shi, L., et al. (2015). "Patient-centered Medical Home Capability and Clinical Performance in HRSA-supported Health Centers." *Med Care* 53(5): 389-395.**

Objectives: To evaluate the relationship between Patient-centered Medical Home (PCMH) model adoption in health centers (HCs) and clinical performance measures and to determine if adoption of PCMH characteristics is associated with better clinical performance. RESEARCH DESIGN: Data came from the Health Resources and Services Administration's 2009 Uniform Data System and the 2009 Commonwealth Fund National Survey of Federally Qualified Health Centers. Clinical performance measures included 2 process measures (childhood immunization and cervical cancer screening) and 2 outcome measures (hypertension control and diabetes control). Total and subscale PCMH scores were regressed on the clinical performance measures, adjusting for patient, provider, financial, and institutional characteristics. Results: The findings showed different directional relationships, with some PCMH domains (care management, test/referral tracking, quality improvement, and external coordination) showing little or no effect on outcome measures of interest, 1 domain (access/communication) associated with improved outcomes, and 1 domain (patient tracking/registry) associated with worse outcomes. Conclusions: This study is among the first to examine the association between PCMH transformation and clinical performance in HCs, providing an understanding of the impact of PCMH adoption within safety-net settings. The mixed results highlight the importance of examining relationships between specific PCMH domains and specific clinical quality measures, in addition to analyzing overall PCMH scores which could yield distorted findings.

## Systèmes de santé / Health Systems

**Carinci, F., et al. (2015). Towards actionable international comparisons of health system performance: expert revision of the OECD framework and quality indicators. *International Journal of Quality in Health Care*. 27 (2) : 137-146**

Objective To review and update the conceptual framework, indicator content and research priorities of the Organisation for Economic Cooperation and Development's (OECD) Health Care Quality Indicators (HCQI) project, after a decade of collaborative work. Design A structured assessment was carried out using a modified Delphi approach, followed by a consensus meeting, to assess the suite of HCQI for international comparisons, agree on revisions to the original framework and set priorities for research and development. Setting International group of countries participating to OECD projects. Participants Members of the OECD HCQI expert group. Results A reference matrix, based on a revised performance framework, was used to map and assess all seventy HCQI routinely calculated by the OECD expert group. A total of 21 indicators were agreed to be excluded, due to the following



concerns: (i) relevance, (ii) international comparability, particularly where heterogeneous coding practices might induce bias, (iii) feasibility, when the number of countries able to report was limited and the added value did not justify sustained effort and (iv) actionability, for indicators that were unlikely to improve on the basis of targeted policy interventions. Conclusions The revised OECD framework for HCQI represents a new milestone of a long-standing international collaboration among a group of countries committed to building common ground for performance measurement. The expert group believes that the continuation of this work is paramount to provide decision makers with a validated toolbox to directly act on quality improvement strategies.

**Fanourgiakis, J. and E. Kanoupakis (2014). "Greek's health, waiting for the 'deus ex machina'."** Expert Review of Pharmacoeconomics & Outcomes Research **14**(5): 637-642.

**Peiró, S. and A. Maynard (2015). Variations in health care delivery within the European Union.** The European Journal of Public Health. **25** (suppl. 1) : 1-2

Health care systems over troubled water European Union (EU) healthcare systems, whether they are National Health Services or Social Insurance systems, are going through difficult times. Governments, the healthcare community and the public are increasingly concerned about the growth of health spending and the sustainability of their healthcare systems. The current economic crisis—the most intense, comprehensive and long lasting in post-war Europe—with its corollary of tax revenue falling, increased social needs and financial failure of the States, has contributed decisively to accentuate this concern, and placed health spending (along other items of social spending) as a critical aspect of the policies to control public sector deficits. While some of the contemporary concerns are directly related to the current economic crisis the recession has exacerbated pre-existing problems. The pressures on all healthcare systems are familiar but resistant to resolution. First, there have been changes in morbidity patterns with the emergence of chronicity and multi-morbidities as the main drivers of healthcare utilization in developed countries. Disease is now evolving into a continuum of exacerbations and relapses leading to long-term functional impairment. These new morbidity patterns require changes in existing organizational structures and the integration of fragmented healthcare delivery systems. Unfortunately an evidence base to facilitate such innovation is absent. Second, the acceleration of technological change (in preventive, diagnostic, therapeutic, surgical, biological, imaging and other technologies), with a very rapid incorporation of new drugs, tests and devices into routine clinical practice has fuelled expenditure inflation. These new technologies sometimes involve significant clinical innovations (although not always cost-effectively) and, in other cases, the 'innovation' is limited to increased in prices (rather than to improved clinical outcomes). The combination of new drugs and technologies ...

## Travail et santé / Occupational Health

**Pichler, S. (2015). "Sickness Absence, Moral Hazard, and the Business Cycle."** Health Economics **24**(6): 692-710.

The procyclical nature of sickness absence has been documented by many scholars in literature. So far, explanations have been based on labor force composition and reduced moral hazard caused by fear of job loss during recessions. In this paper, we propose and test a third mechanism caused by reduced moral hazard during booms and infections. We suggest that the workload is higher during economic booms and thus employees have to go

to work despite being sick. In a theoretical model focusing on infectious diseases, we show that this will provoke infections of coworkers leading to overall higher sickness absence during economic upturns. Using state-level aggregated data from 112 German public health insurance funds (out of 145 in total), we find that sickness absence due to infectious diseases shows the largest procyclical pattern, as predicted by our theoretical model. Copyright © 2014 John Wiley & Sons, Ltd.

## Vieillesse / Ageing

### **Karlsberg Schaffer, S. (2015). "The Effect of Free Personal Care for the Elderly on Informal Caregiving." *Health Economics* 24: 104-117.**

Population forecasters have predicted that the proportion of people in the UK aged 65 years and older will rise significantly in coming decades. This shift in demographics will put increasing pressure on the National Health Service and providers of social care. However, older people do not rely only on care provided by the state; informal care of the elderly is often supplied by family and friends. Therefore, the relationship between formal and informal care and the reaction of informal carers to institutional changes is an important policy issue. This study uses individual level data from the British Household Panel Survey to estimate the effects of the introduction of free personal care for the elderly in Scotland on informal care behaviour. As the change in policy applied only to Scotland, a natural experiment is formed allowing a difference-in-differences approach to be used. This paper finds that the introduction of the policy increased the probability of women supplying informal care by around six percentage points. In addition, for both sexes, it reports evidence of a shift away from the upper and lower tails towards the middle of the hours of care distribution as a result of the change in policy. Copyright © 2015 John Wiley & Sons, Ltd.

### **Lynn, J. and A. Montgomery (2015). "Creating a Comprehensive Care System for Frail Elders in "Age Boom" America." *The Gerontologist* 55(2): 278-285.**

Current options being discussed by policymakers cannot yield the highly reliable, highly efficient service delivery system—inclusive of both health care and community-based supportive services—that the nation's upcoming and transformative "age wave" will require. More far-reaching and rapid innovations in policy and health care delivery are essential. The MediCaring Accountable Care Community initiative is a comprehensive model that can deliver higher quality care for frail elderly Medicare beneficiaries at a lower per capita cost. The savings generated by adhering to established geriatric principles in the delivery of medical care would help fund community-based long-term services and supports (LTSS), using a modified Accountable Care Organization (ACO) known as an Accountable Care Community (ACC). A Community Board would monitor the quality and supply of services for frail elders, the most expensive phase of most lives. The constellation of improvements that form the basis of this model are congruent with the goal of improving access to LTSS, which is one of the 4 areas targeted by the Sixth White House Conference on Aging.

### **Makai, P., et al. (2015). "Cost-effectiveness of integrated care in frail elderly using the ICECAP-O and EQ-5D: does choice of instrument matter?" *Eur J Health Econ* 16(4): 437-450.**

Economic evaluations likely undervalue the benefits of interventions in populations receiving both health and social services, such as frail elderly, by measuring only health-related quality of life. For this reason, alternative preference-based instruments have been developed for economic evaluations in the elderly, such as the ICECAP-O. The aim of this paper is twofold:

(1) to evaluate the cost-effectiveness using a short run time frame for an integrated care model for frail elderly, and (2) to investigate whether using a broader measure of (capability) wellbeing in an economic evaluation leads to a different outcome in terms of cost-effectiveness. We performed univariate and multivariate analyses on costs and outcomes separately. We also performed incremental net monetary benefit regressions using quality adjusted life years (QALYs) based on the ICECAP-O and EQ-5D. In terms of QALYs as measured with the EQ-5D and the ICECAP-O, there were small and insignificant differences between the instruments, due to negligible effect size. Therefore, widespread implementation of the Walcheren integrated care model would be premature based on these results. All results suggest that, using the ICECAP-O, the intervention has a higher probability of cost-effectiveness than with the EQ-5D at the same level of WTP. In case an intervention's health and wellbeing effects are not significant, as in this study, using the ICECAP-O will not lead to a false claim of cost-effectiveness of the intervention. On the other hand, if differences in capability QALYs are meaningful and significant, the ICECAP-O may have the potential to measure broader outcomes and be more sensitive to differences between intervention and comparators.

**Mc Hugh, S., et al. (2015). "Body mass index and health service utilisation in the older population: results from The Irish Longitudinal Study on Ageing." *Age and Ageing* 44(3): 428-434.**

Background: obesity is associated with higher healthcare costs in older people; however, estimates are predominantly based on the use of primary and secondary services. Our objective was to estimate the effect of overweight and obesity on the use and cost of allied health services among middle-aged and older people. Methods: the study used data from The Irish Longitudinal Study of Ageing (TILDA), a nationally representative study of adults aged  $\geq 50$  sampled using multistage stratified clustered sampling, which included objective measures of height and weight. Body mass index was categorised as normal (18.5–24.99 kg/m<sup>2</sup>), overweight (25.00–29.99 kg/m<sup>2</sup>), moderate obesity (30.00–34.99 kg/m<sup>2</sup>), severe obesity (35.00–39.99 kg/m<sup>2</sup>) or morbid obesity ( $\geq 40$  kg/m<sup>2</sup>). Participants were asked about a range of allied health services including dietetic services, public health nurse visits, chiropody and home help. Adjusted seemingly unrelated biprobit models were used to account for unobserved heterogeneity associated with the use of services. Results: among 5,841 participants, 77.6% (95% CI = 76–79%) were overweight or obese ( $n = 4,534$ ). All classes of obesity were significantly associated with higher general practitioner service use ( $P < 0.05$ ). Moderate and severe obesity were associated with increased use of out-patient services, while only moderate obesity was associated with increased hospital admissions ( $P < 0.05$ ). Moderate and severe obesity were significantly associated with chiropody service use ( $P < 0.05$ ) with an estimated annual cost of €919,662. Morbid obesity was associated with dietetic service use ( $P < 0.001$ ) with an annual cost of €580,013. Conclusion: given these costs and improvements in life expectancy, an increasingly obese older population presents new challenges for healthcare delivery.

**Pin, S., et al. (2015). "[Facilitators and barriers for older people to take part in fall prevention programs: A review of literature]." *Rev Epidemiol Sante Publique* 63(2): 105-118.**

Background: Falling is the leading cause of accidental death after 65. Fall prevention programs are effective, but they involve few seniors. This article reviewed the literature on facilitators and barriers to participate in such programs. Methods: A literature review was conducted to identify documents in English, German and French published between 1990 and May 2012. Medline database, PsychInfo, Psychological and behavioral sciences and Francis were systematically searched, as were the bibliographies and some journals of public health, gerontology and social sciences. Of 462 documents found, 19 were selected and analyzed. Results: Of the 19 articles selected, 12 were on qualitative studies and 7 on

literature reviews. Among the barriers to participation in falls prevention programs, documents highlighted the perception of fall as an inevitable event, the inadequate timing of prevention intervention and material difficulties. Conversely, being referred to prevention intervention by a professional, being convinced by the social benefits of interventions and the adequacy of interventions to the needs of beneficiaries were factors facilitating the participation and compliance of the elderly. CONCLUSION: This literature review identified three major issues to consider when implementing sustainable and acceptable fall prevention programs: choice of the referring agent, and social representations of falling.

**Rose, M. S., et al. (2015). "Improving Policies for Caregiver Respite Services." The Gerontologist 55(2): 302-308.**

This paper provides a template for the decade ahead regarding the delivery, supply, and funding of caregiver respite services. Policy changes are needed to address these issues as concerns about our country's ability to meet future caregiving needs are growing along with our aging population. Federal initiatives and state-level policies and programs affecting respite are reviewed and directions for policy advancement are highlighted. Much more work is needed to educate caregivers and the general public about the necessity for respite beginning early in the caregiving career to prevent burnout and other adverse effects. Because it is unlikely that there will be a sufficient number of direct-care workers to replace unpaid caregivers, improved policies are needed to ensure that their situation is sustainable through increased availability of high-quality respite and other services vital to caregiver health and well-being. Among the 2015 White House Conference on Aging's priorities in the next decade, policies on long-term services and supports will require focused attention on family caregivers and the direct-care workforce to strengthen their ability to give care now and support their own physical, emotional, and financial needs in the future.

**Theou, O., et al. (2015). "Measuring frailty using self-report and test-based health measures." Age and Ageing 44(3): 471-477.**

Background: previously, frailty indices were constructed using mostly subjective health measures. The reporting error in this type of measure can have implications on the robustness of frailty findings. Objective: to examine whether frailty assessment differs when we construct frailty indices using solely self-reported or test-based health measures. Design: secondary analysis of data from The Irish Longitudinal study on Ageing (TILDA). Subjects and methods: 4,961 Irish residents (mean age: 61.9 ± 8.4; 54.2% women) over the age of 50 years who underwent a health assessment were included in this analysis. We constructed three frailty indices using 33 self-reported health measures (SRFI), 33 test-based health measures (TBF) and all 66 measures combined (CFI). The 2-year follow-up outcomes examined were all-cause mortality, disability, hospitalisation and falls. Results: all three indices had a right-skewed distribution, an upper limit to frailty, a non-linear increase with age, and had a dose-response relationship with adverse outcomes. Levels of frailty were lower when self-reported items were used (SRFI: 0.12 ± 0.09; TBF: 0.17 ± 0.15; CFI: 0.14 ± 0.13). Men had slightly higher frailty index scores than women when test-based measures were used (men: 0.17 ± 0.09; women: 0.16 ± 0.10). CFI had the strongest prediction for risk of adverse outcomes (ROC: 0.64–0.81), and age was not a significant predictor when it was included in the regression model. Conclusions: except for sex differences, characteristics of frailty are similar regardless of whether self-reported or test-based measures are used exclusively to construct a frailty index. Where available, self-reported and test-based measures should be combined when trying to identify levels of frailty.

**Voukelatos, A., et al. (2015). "The impact of a home-based walking programme on falls in older people: the Easy Steps randomised controlled trial." Age and Ageing 44(3): 377-383.**

Background: walking is the most popular form of exercise in older people but the impact of walking on falls is unclear. This study investigated the impact of a 48-week walking programme on falls in older people. Methods: three hundred and eighty-six physically inactive people aged 65+ years living in the community were randomised into an intervention or control group. The intervention group received a self-paced, 48-week walking programme that involved three mailed printed manuals and telephone coaching. Coinciding with the walking programme manual control group participants received health information unrelated to falls. Monthly falls calendars were used to monitor falls (primary outcome) over 48 weeks. Secondary outcomes were self-reported quality of life, falls efficacy, exercise and walking levels. Mobility, leg strength and choice stepping reaction time were measured in a sub-sample ( $n = 178$ ) of participants. Results: there was no difference in fall rates between the intervention and control groups in the follow-up period (IRR = 0.88, 95% CI: 0.60–1.29). By the end of the study, intervention group participants spent significantly more time exercising in general, and specifically walking for exercise (median 1.69 versus 0.75 h/week,  $P < 0.001$ ). Conclusion: our finding that a walking programme is ineffective in preventing falls supports previous research and questions the suitability of recommending walking as a fall prevention strategy for older people. Walking, however, increases physical activity levels in previously inactive older people.